

Amendments to the Claims:

This listing will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please cancel claims 20, 22 and 24.

1. (Currently Amended) A method of reducing superoxide damage to a eubacterial bacterial cell, comprising the step steps of

a. vector-based expression of a nucleic acid encoding the YggX polypeptide as set forth in gene (SEQ ID NO: 11) SEQ ID NO:11, wherein the cells are rendered more resistant to superoxide damage, wherein the cells comprise an oxygen-labile enzyme, and wherein there is no increased superoxide dismutase activity in the cells, wherein the lack of increase in superoxide dismutase activity is relative to the cells not expressing the in the absence of the vector-based expression of YggX gene, and wherein the vector-based expression is in a eubacterial bacterial cell and

b. examining the oxygen-labile enzyme to determine the amount of oxidative damage.

2.-15. (Cancelled)

16. (Currently Amended) A method of reducing superoxide damage to a bacterial cell, comprising the step steps of vector-based expression of a gene nucleic acid encoding a YggX homolog, wherein the cells comprise an oxygen-labile enzyme, wherein the cells are rendered more resistant to superoxide damage and wherein there is no increased superoxide dismutase activity in the cells relative to the cells not expressing in the absence of the vector-based expression of the YggX homolog, wherein the YggX homolog comprises the amino acid sequence motif defined by SEQ ID NO:1 and wherein the vector-based expression is in a

eubacterial bacterial cell and examining the oxygen-labile enzyme to determine the amount of oxidative damage.

17. (Currently Amended) A method of reducing superoxide damage to a eubacterial bacterial cell, comprising the step steps of

a. vector-based expression of a gene nucleic acid encoding a YggX homolog, wherein the cells are rendered more resistant to superoxide damage, wherein the cells comprise an oxygen-labile enzyme, and wherein there is no increased superoxide dismutase activity in cells relative to the cells not expressing in the absence of the vector-based expression of the YggX homolog, wherein the vector-based expression is in a eubacterial bacterial cell and wherein the YggX homolog is obtained from an organism selected from the group consisting of S. typhimurium, S. typhi, E. coli, Y. pestis, H. influenza, S. putrefaciens, P. aeruginosa, P. putida, N. gonorrhoeae, T. ferrooxidans, B. bronchiseptica and X. fastidiosa selected from the group consisting of SEQ ID NOS:34-45 and

b. examining the oxygen-labile enzyme to determine the amount of oxidative damage.

18. (Currently Amended) A method of reducing superoxide damage to a eubacterial bacterial cell, comprising the step of

a. vector-based expression of a gene nucleic acid encoding a YggX homolog, wherein the cells are rendered more resistant to superoxide damage, wherein the cells comprise an oxygen-labile enzyme, and wherein there is no increased superoxide dismutase activity in the cells relative to the cells not expressing in the absence of vector-based expression of the YggX homolog, wherein the vector-based expression is in a eubacterial bacterial cell and wherein the YggX homolog is obtained from an organism

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~~selected from the group consisting of *B. pertussis*, *B. parapert*, *B. bronchi*, *A. actin*, *P. multocida*, *H. influenzae*, *H. ducreyi*, *S. putrefaciens*, *V. cholerae*, *E. coli*, 0157\_H7EDL933, 0157\_H7, *S. para*, *S. enteritidis*, *S. dublin*, *Styphi*CT18, *S. typhimurium*, *K. pneumo*, *Y. peritis*, *B. uehnera*, *X. fastidiosa*, *P. syring*, *P. putida*, *P. aeruginosa*, *N. gonorrhoeae*, *N. meningit*B, *N. meningA*, *B. mallei*, *B. pseudomallei*, *T. ferrooxidans*, *M. capsulatus* and *C. burneti* selected from the group consisting of SEQ ID NOS:2-33 and~~

b. examining the oxygen-labile enzyme to determine the amount of oxidative damage.

19. (Currently Amended) A method of increasing the resistance of ~~an eubacterial~~ a bacterial enzyme having an oxygen labile Fe-S cluster/center to oxidative damage, comprising

a. co-expressing the enzyme with YggX protein as set forth in SEQ ID NO: 11 (SEQ ID NO. 11) in a ~~eubacterial~~ bacterial cell, wherein the increased resistance is relative to the cells not expressing in the absence of vector-based expression of the YggX protein and

b. examining the oxygen-labile enzyme to determine the amount of oxidative damage.

20. (Cancelled)

21. (Currently Amended) A method of increasing the resistance of ~~an eubacterial~~ a bacterial enzyme having an oxygen labile Fe-S cluster/center to oxidative damage, comprising

a. co-expressing the enzyme with a homolog of the an YggX protein in a ~~eubacterial~~ bacterial cell, wherein the increased resistance is relative to the cells not

expressing in the absence of vector-based expression of the YggX homolog, and wherein the homolog comprises the amino acid sequence motif defined by SEQ ID NO:1 and

b. examining the oxygen-labile enzyme to determine the amount of oxidative damage.

22. (Cancelled)

23. (Currently Amended) A method of increasing the resistance of an eubacterial a bacterial enzyme having an oxygen labile Fe-S cluster/center to oxidative damage, comprising

a. co-expressing the enzyme with a homolog of the YggX protein in a bacterial eubacterial cell, wherein the increased resistance is relative to the cells not expressing in the absence of vector-based expression of the YggX homolog, and wherein the homolog is obtained from an organism selected from the group consisting of *S. typhimurium*, *S. typhi*, *E. coli*, *Y. pestis*, *H. influenza*, *S. putrefaciens*, *P. aeruginosa*, *P. putida*, *N. gonorrhoeae*, *T. ferrooxidans*, *B. bronchiseptica* and *X. fastidiosa* selected from the group consisting of SEQ ID NOS:34-45 and

b. examining the oxygen-labile enzyme to determine the amount of oxidative damage.

24. (Cancelled)

25. (Currently Amended) A method of increasing the resistance of an eubacterial a bacterial enzyme having an oxygen labile Fe-S cluster/center to oxidative damage, comprising

a. co-expressing the enzyme with a homolog of the YggX protein in a eubacterial bacterial cell, wherein the increased resistance is relative to the cells not

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expressing in the absence of vector-expression of the YggX homolog, and wherein the homolog is obtained from an organism selected from the group consisting of *B. pertussis*, *B. parapert*, *B. bronchi*, *A. actin*, *P. multocida*, *H. influenzae*, *H. ducreyi*, *S. putrefaciens*, *V. cholerae*, *E. coli*, 0157 H7EDL933, 0157 H7, *S. para*, *S. enteritidis*, *S. Dublin*, *Styphi*CT18, *S. typhimurium*, *K. pneumo*, *Y. pesits*, *B. uehnera*, *X. fastidiosa*, *P. syring*, *P. putida*, *P. aeruginosa*, *N. gonorrhoeae*, *N. meningit*B, *N. meningit*A, *B. mallei*, *B. pseudomallei*, *T. ferrooxidans*, *M. capsulatus* and *C. burneti*. selected for the group consisting of SEQ ID NOS:2-33 and

b. examining the oxygen-labile enzyme to determine the amount of oxidative damage.

26. (Cancelled)